

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): Device for comminuting empty containers selected from the group consisting of beverage bottles and beverage cans made of plastic/PET or tin plate, comprising a housing / frame (1), having a fill-in opening (2), as well as an exit opening (3), and

a cutting unit (4) disposed in the housing (1), as well as means for drive and control of the cutting unit (4),

whereby

the cutting unit (4) contains at least cutting rollers (4.1 and 4.2), disposed at a distance from one another with regard to their axes of rotation, wherein

the cutting unit (4) is a cutting unit (4) used for shredding paper or paperboard in document shredders,

in which

each cutting roller (4.1 and 4.2) has multiple cutting disks (5), which are each disposed at an axial distance from one another by means of a circumferential groove (gap E), and

the axes of rotation (A1 and A2) of the cutting rollers (4.1 and 4.2) are disposed at an axial distance from one another, in such a manner that adjacent cutting disks (5) of the two cutting rollers (4.1 and 4.2) mesh,

whereby a gap, the cutting play (16), is present between two side flanks (5.2) of adjacent cutting disks (5), which flanks face one another, in each instance;

wherein the cutting mechanism is a particle cut cutting mechanism and wherein the cutting disks (5) have grooves (6) worked into their circumference surface (5.1), whose trailing flank (6.3), in the direction of rotation (R, R'), forms a cutting tooth (5.3), together with the circumference surface (5.1), which tooth has an acute angle and points in the direction of rotation, whereby the groove flank (6.3), which begins at the tip, has a linear progression as well as a progression directed counter to the direction of rotation (R, R'), and the subsequent transition region

(6.4) to the groove base (6.2) and/or the groove flank (6.1) that lies in the direction of rotation is configured in arc shape

Claim 2 (Canceled).

Claim 3 (Previously Presented): Device according to claim 1, wherein a separator / selector (10) is disposed ahead of the cutting mechanism and wherein the separator / selector (10) is a vane shaft that possesses three or four vanes (12), the free vane ends of which trail, seen in the direction of rotation (R').

Claim 4 (Canceled).

Claim 5 (Previously Presented): Device according to claim 3, wherein the vanes attached in the center, i.e. on the axle of rotation, are configured in polygon manner (17) or in arc shape (18) towards their free ends.

Claim 6 (Previously Presented): Device according to claim

3, wherein the separator / selector (10) is disposed ahead of the cutting mechanism, the separator/selector comprising two star-shaped shafts, seen in a face side view.

Claim 7 (Canceled).

Claim 8 (Previously Presented): Device according to claim 1, wherein the so-called cutting play (16) between adjacent cutting disks (5) of the cutting mechanism has a value between 0.005 mm and 2 mm.

Claim 9 (Previously Presented): Device according to claim 1, wherein the overlap of adjacent and opposite cutting disks (5) has a value between 0.5 mm and 15 mm.

Claim 10 (Previously Presented): Device according to claim 1, wherein the cutting rollers comprise the material 42CrMoS4.

Claim 11 (Previously Presented): Device according to claim

1, wherein the cutting disks (5) of the cutting rollers (4.1 and 4.2) are hardened.

Claim 12 (Previously Presented): Device according to claim 1, wherein the bearings of the cutting rollers (4.1 and 4.2) are set into their bearing plates (14) from the outside.

Claim 13 (Previously Presented): Device according to claim 1, wherein the diameter (D) of the cutting disks (5) lies in the range of 50 to 200 mm.

Claim 14 (Previously Presented): Device according to claim 1, wherein the drive (7) of the cutting rollers (4.1 and 4.2) is designed for speeds of rotation in the range of 30 to 150 rpm.

Claim 15 (Previously Presented): Device according to claim 1, wherein strippers (4.6) are disposed between the cutting disks (5), whereby each stripper (4.6) only partially surrounds the cutting rollers (4.1 and 4.2, respectively) at their core

diameter (4.3), in each instance, in the circumferential groove (E).

Claim 16 (Previously Presented): Device according to claim 1, wherein a photo eye is disposed in the region of the fill-in opening (2), to generate a starting pulse for the cutting rollers (4.1 and 4.2).

Claim 17 (Previously Presented): Device according to claim 1, wherein nozzles are disposed in the housing (1), to apply disinfectant to the cutting rollers (4.1 and 4.2) and/or the fill-in opening (2) and the outlet opening (3).

Claim 18 (Canceled).

Claim 19 (Currently Amended): Device according to claim ~~2~~ 1, wherein the two groove flanks (6.1 and 6.3) run parallel to one another or diverge from one another.

Claim 20 (Currently Amended): Device according to claim ~~2~~ 1, wherein the tip angle (W) of a cutting tooth (5.3) lies between 45° and 80°.

Claim 21 (Currently Amended): Device according to claim ~~2~~ 1, wherein the arc defined by a groove (6) and a segment of the circumference surface (5.1) of a cutting disk (5) that follows same (6) is determined, by 40%, by the groove (6).

Claim 22 (Previously Presented): Device according to claim 1, wherein the device can be coupled to automated bottle and/or can return machines or integrated into same.

Claim 23 (New): Device for comminuting empty containers selected from the group consisting of beverage bottle and beverage cans made of plastic/PET or tin plate, comprising a housing / frame (1), having a fill-in opening (2), as well as an exit opening (3), and a cutting unit (4) disposed in the housing (1), as well as

means for drive and control of the cutting unit (4),

whereby

the cutting unit (4) contains at least cutting rollers (4.1 and 4.2), disposed at a distance from one another with regard to their axes of rotation, wherein

the cutting unit (4) is a cutting unit (4) used for shredding paper or paperboard in document shredders,

in which

each cutting roller (4.1 and 4.2) has multiple cutting disks (5), which are each disposed at an axial distance from one another by means of a circumferential groove (gap E),

and

the axes of rotation (A1 and A2) of the cutting rollers (4.1 and 4.2) are disposed at an axial distance from one another, in such a manner that adjacent cutting disks (5) of the two cutting rollers (4.1 and 4.2) mesh,

whereby a gap, the cutting play (16), is present between two side flanks (5.2) of adjacent cutting disks (5), which flanks face one another, in each instance;

wherein a separator / selector (10) is disposed ahead of the cutting mechanism;

wherein the separator / selector (10) is a vane shaft that possesses three or four vanes (12), the free vane ends of which trail, seen in the direction of rotation R'); and

wherein stabbing elements (21) that point in the direction of rotation (R') are disposed on the surface segments of the separator (10) that contact the fed-in containers part of the time.